

CLAIMS

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1. A motorcycle saddlebag comprising:
a body having an inner surface defining a cavity;
a lid having an inner surface and movable between an open position in
5 which said lid does not fully cover said cavity and a closed position in which said
inner surface of said lid defines an upper boundary of said cavity and in which
said lid fully covers said cavity; and
a hinge assembly interconnecting said body to said lid, said hinge
assembly including a first mounting member mounted to said inner surface of said
10 body, a second mounting member mounted to said inner surface of said lid, and a
coupling assembly pivotally coupling said first and second mounting members to
each other, wherein said hinge assembly is completely enclosed within said cavity
when said lid is in said closed position.

15 2. The saddlebag of claim 1, wherein said first mounting member
includes a first pair of mounting bosses and a first pin supported by said first pair
of mounting bosses, wherein said first mounting member also includes a second
pair of mounting bosses and a second pin supported by said second pair of
mounting bosses, wherein said first and second pins are substantially parallel and
20 non-collinear with respect to each other, and wherein said second mounting
member is interconnected with and pivotal about both of said first and second
pins.

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3. The saddlebag of claim 2, wherein said coupling assembly includes first and second coupling members, said first coupling member being pivotally coupled between said first pin and said second mounting member, and said second coupling member being pivotally coupled between said second pin and said second mounting member.

4. The saddlebag of claim 3, wherein said first and second coupling members are substantially identical to each other.

5. The saddlebag of claim 3, wherein said second mounting member includes third and fourth pairs of mounting bosses, and third and fourth pins supported by said third and fourth pairs of mounting bosses, respectively, said third and fourth pins being substantially parallel and non-collinear with respect to each other as well as with respect to said first and second pins, wherein said first coupling member is pivotally coupled between said first pin and said third pin, and said second coupling member is pivotally coupled between said second pin and said fourth pin.

6. The saddlebag of claim 5, wherein said first and second pins are spaced from each other a first distance and wherein said third and fourth pins are spaced from each other a second distance different from said first distance.

5 7. The saddlebag of claim 1, wherein said lid and body engage each other in a joining perimeter, and wherein said coupling assembly guides said lid through substantially vertical translatory motion at least until said lid substantially entirely disengages said body, and then pivots said lid about a substantially horizontal axis of rotation.

10 8. The saddlebag of claim 1, wherein said lid and body each include a lip, said lips of said lid and body engaging each other in a joining perimeter when said lid is in said closed position, and wherein said coupling assembly includes a means for first lifting said lid lip substantially entirely off of said body lip and then pivoting said lid with respect to said body as said lid is moved toward said open position.

15 9. The saddlebag of claim 1, wherein said coupling assembly includes a pivot axis about which said lid is pivotal with respect to said body, and wherein said coupling assembly is configured to move said pivot axis with respect to said body as said lid is opened and closed.

20 10. The saddlebag of claim 9, wherein said pivot axis is moved closer to said hinge assembly as said lid is moved toward said open position, such that the motion of said lid with respect to said body transitions from substantially purely translational motion to substantially purely rotational motion.

11. A motorcycle saddlebag comprising a lid and a body each having external surfaces, said lid and body being coupled to each other with a coupling assembly to facilitate opening and closing of said lid with respect to said body, said saddlebag further comprising a chrome plating adhered to said external surface of at least one of said lid and body.

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sub a27 12. The saddlebag of claim 11, wherein one of said lid and body is constructed of an ABS/polycarbonate blend plated with chrome plating.

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13. A motorcycle saddlebag comprising:
 an injection-molded body defining a cavity, said body having a body lip
 formed integrally with said body and defining a mouth of said cavity;
 5 a gasket positioned on said body lip; and
 a lid having a lid lip, said lid being movably mounted to said body to open
 and close said saddlebag, said gasket being sandwiched between said lid lip and
 said body lip when said lid is in a closed position.

10 14. The saddlebag of claim 13, wherein said lid lip is manufactured
 separately from the rest of said lid, said lid lip including an undercut, said lid
 including a lid edge and at least one internal gusset, wherein said lid lip undercut
 is positioned on said lid lip edge and said lid lip is further in contact with said
 gusset such that said gusset reduces shear stress on said lid lip, said lid lip being
 15 glued to said lid.

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 15. The saddlebag of claim 13, further comprising a hinge coupling
 said lid to said body, said hinge including means for moving said lid in a
 substantially translational manner away from said body during opening of said
 20 saddlebag such that substantially all portions of said lid lip substantially entirely
 and simultaneously disengage said gasket, said hinge also including means for
 pivoting said lid with respect to said body once said gasket has been substantially
 entirely disengaged.

16. The saddlebag of claim 13, further comprising a hinge coupling
said lid to said body, said hinge having a pivot axis and a mechanism for moving
said pivot axis during opening and closing of said lid such that substantially all
portions of said lid lip substantially entirely and simultaneously disengage said
gasket during opening of said lid, and substantially entirely and simultaneously
engage said gasket during closing of said lid.

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17. A motorcycle saddlebag comprising:

a lid;

a body;

5 a hinge assembly coupling said lid to said body;

a biasing member interconnecting said lid and said body, said biasing member biasing said lid toward an open position; and

10 a latch interconnecting said lid and said body when said lid is in a closed position, said latch resisting the biasing force of said biasing member to hold said lid in said closed position until said latch is disconnected.

18. The saddlebag of claim 17, wherein said biasing member is a gas spring.

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19. A motorcycle saddlebag comprising:

a lid;

a body;

5 a hinge assembly coupling said lid and body to facilitate moving said lid between an open position and a closed position with respect to said body; and

a locking assembly selectively locking said lid in said closed position, said locking assembly including a latch mounted to said lid, a push button slidably mounted to said body, and a hook pivotally mounted to said push button by a pin, 10 wherein depressing said push button causes said hook to pivot about said pin.

20. The saddlebag of claim 19, further comprising a cam mechanism rotatably coupled to said body, wherein said cam mechanism engages said latch when said lid is in said closed position, wherein depression of said push button 15 causes said hook to engage said cam mechanism and wherein engagement of said cam mechanism by said hook causes said cam mechanism to rotate thereby disengaging said latch and allowing said lid to be moved toward said opened position.

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21. A method for opening a motorcycle saddlebag having a lid and a body, the method comprising:

moving the lid in a substantially vertical translational manner with respect to the body to a partially open position; and then

5 moving the lid in a substantially rotational manner with respect to the body to a fully open position.

22. The method of claim 21, further comprising:

providing a hinge assembly having first and second mounting members;

10 mounting the first mounting member inside the lid;

mounting the second mounting member inside the body; and

interconnecting the first and second mounting members with a four bar linkage to enable said acts of translational movement and rotational movement.

15 23. The method of claim 21, further comprising:

mounting a push button latching mechanism to one of the lid and body;

biasing the lid toward the fully open position with a biasing member;

interconnecting the lid to the body with the latching mechanism when the lid is closed;

20 resisting the biasing force of the biasing member with the latching mechanism;

releasing the latching mechanism in response to actuation of the push button; and

25 opening the lid under the influence of the biasing member after the latching mechanism is released.

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